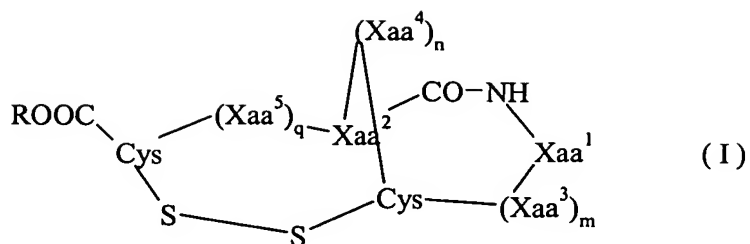


What is Claimed is:

1. A bicyclic oligopeptide or ester thereof having the capability to inhibit the glucagon receptor, comprised of
 - (a) a first cyclic group, which comprises at least one cysteine group and is formed by an amide bonding of the N-terminal amino acid with the second carboxylate group of a diacid amino acid, and
 - (b) a second cyclic group which is formed by an amide bonding of an amino acid with the α -carboxylate group of said diacid amino acid, and by a disulfide bonding of the C-terminal cysteine and a cysteine group within the first cyclic group (a).
2. Bicyclic oligopeptide according to claim 1, further composed of at least 3 amino acid moieties between the N-terminal amino acid and the said diacid amino acid.
3. Bicyclic oligopeptide according to claim 1, comprised of at least 4 amino acid moieties between the said diacid amino acid and the C-terminal cysteine.
4. Bicyclic oligopeptide according claim 1, obtainable by Isolation from a *Actinomyces* sp and optionally followed by esterification.
5. Bicyclic oligopeptide according to claim 4, isolated from *Streptomyces* sp.
6. Bicyclic oligopeptide according to claim 5, isolated from *Streptomyces* deposited under the accession number DSM 14996.
7. A bicyclic oligopeptide of claim 1, according to formula I,



wherein

5 Xaa¹ represents a N-terminal α-amino acid,

Xaa² represents a diacid amino acid,

Xaa³, Xaa⁴ and Xaa⁵ each independently represent an α-amino acid,

m, n and q each independently represent an integer from 2 to 12, and

R represents a hydrogen atom or a C₁₋₆ alkyl group.

10 8. Bicyclic oligopeptide of formula I according to claim 7, wherein

Xaa¹ represents a N-terminal α-amino acid selected from the group consisting of glycine, alanine, leucine, norleucine and valine,

Xaa² represents an aspartic or glutamic acid,

15 Xaa³ each independently represent an α-amino acid selected from the group consisting of glycine, alanine, leucine, norleucine, valine, proline and tryptophan,

Xaa⁴ each independently represent an α-amino acid selected from the group consisting of glycine, alanine, leucine, norleucine, valine, proline and serine, and

20 Xaa⁵ each independently represent an α-amino acid selected from the group consisting of glycine, alanine, isoleucine, leucine, norleucine, valine, proline, threonine, asparagine, tryptophan and serine,

m represents an integer from 3 to 6,

n represents an integer from 2 to 4,

25 q represents an integer from 6 to 12, and

R represents a hydrogen atom or a methyl group.

9. Bicyclic oligopeptide according to claim 1, wherein each amino acid exists in the (L)-configuration.
10. Bicyclic nonadeca-peptide according to claim 1, characterized by the following sequence (SEQ ID NO. 1):

$$\left[\text{xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx} \right]$$

$$\text{HN-Gly}^1\text{-Leu-Pro-Trp-Gly-Cys}^6\text{-Pro-Ser-Asp}^9\text{-Ile-Pro-Gly-}$$

$$\quad \quad \quad |$$

$$\text{-Trp-Asn-Thr-Pro-Trp-Ala-Cys}^{19}\text{-COOR,}$$

wherein
the amino group of Gly¹ is linked with the β-carboxylate group of Asp⁹ via an amide group, and
the thiole groups of the cysteines Cys⁶ and Cys¹⁹ are linked via a disulfide bridge.
11. A medicament comprised of a bicyclic oligopeptide according to claim 1.
12. Pharmaceutical composition comprising at least one bicyclic oligopeptide according to claim 1, and a pharmacologically acceptable carrier.
13. Pharmaceutical composition according to claim 12 further comprised of an active ingredient selected from the group consisting of antidiabetic agents, lipid modulating agents, anti-obesity agents and cardiovascular agents.
14. Pharmaceutical composition according to claim 13, wherein the antidiabetic agent is selected from the group comprising biguanides, glucosidase inhibitors, PPARgamma modulators, dual PPARalpha/gamma agonists, RXR modulators, SGLT2 inhibitors, aP2 inhibitors, insulin sensitizers, GLP-1 or mimetics, DPPIV inhibitors, PTP-1B inhibitors, GSK-3 inhibitors and a metiglinide.
15. Pharmaceutical composition according to claim 13, wherein the antidiabetic agent is selected from the group consisting of metformin, glyburide, glibenclamide,

glimepiride, glypiride, glipizide, chlorpropamide, gliclazide, acarbose, miglitol, pioglitazone, troglitazone, rosiglitazone, insulin, isaglitazone, repaglinide, nateglinide, and exendin-4.

16. Use of a bicyclic oligopeptide according to claim 1 for the preparation of a
5 medicament for the treatment or prevention of diseases, in which glucagon
receptors are involved.
17. A method of treating *diabetes mellitus* comprised of the steps of administering to a
patient in need thereof a therapeutically effective amount of a bicyclic oligopeptide
according to claim 1.